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On the synonymy in the genus *Loxostege* Hbn. (*Lepidoptera*, *Pyralidae*)

Kesran Akin¹

Abstract: On the synonymy in the genus *Loxostege* Hbn. (*Lepidoptera*, *Pyralidae*). *Cesa News* 89: 1-2, 2 figs.

In this short paper, a new synonym of *Loxostege peltaloides* Rebel: *Loxostege halil* Kemal & Koçak is proposed (**syn. nov.**). Information on status of *Loxostege peltaloides*, together with distribution, flight activity, generation are mentioned. Name bearing types are also illustrated.

Key words: *Loxostege peltaloides*, *Loxostege halil*, *Pyralidae*, *Lepidoptera*, synonymy, nomenclature, fauna, Turkey.

Recently, Prof. Koçak informed me about the ambiguity of *Loxostege halil* described by Kemal & Koçak (2007), and kindly allow me to search about its validity. Unfortunately, the type material of *Loxostege halil* is not accessible at present, as all the materials collected by them before 2011, have been packed and transferred to a safe place temporarily in Ankara, after the strong earthquake 2011 occurred in Van city. I obtained from Koçak only a photograph of the holotype taken in 2007 (**Fig.1**).

During my short visit to “Naturhistorisches Museum” in Vienna in early May, I had an opportunity to see the pyralid material from Akşehir (Konya Province) published by Wagner (1932), and Rebel (1932). Among them I have noticed three specimens of *Loxostege peltaloides* Rbl., which are phenotypically similar to *Loxostege halil*.

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Rebel (1932: 187-188, fig.) described this species as "*Eurycreon peltaloides*" from a single male (Type) collected from Akşehir on 5. October 1931 (preserved in "Naturhistorisches Museum, Wien") (**Fig.2**). Later, Osthelder (1935: 97) reported this species as "*Loxostege peltaloides* Rbl." from Kahramanmaraş Prov. (Ahır Dağı) on November, 1930 based upon 4 males. Amsel (1938: 158) mentioned this species as "*Phlyctaenodes peltaloides* Rbl." from Sivas Province, basing upon the material collected on 1-7. October by Zukowsky. Koçak & Kemal (2007) described the species "*Loxostege halil*" based upon two males (Holotype and Paratype) from the vicinity of Çatak (Van Province), collected on 5 November 2001.

After examining the name bearing types (**Figs.1,2**), I propose here the name *Loxostege halil* Kemal & Koçak, 2007 as junior synonym of *Eurycreon peltaloides* Rebel, 1932, due to their external similarities (**syn.nov.**). For the time being, genitalic comparison cannot be made, as providing of *halil* material is not possible. This species is currently placed in the genus *Loxostege* Hbn. (Osthelder, 1935).

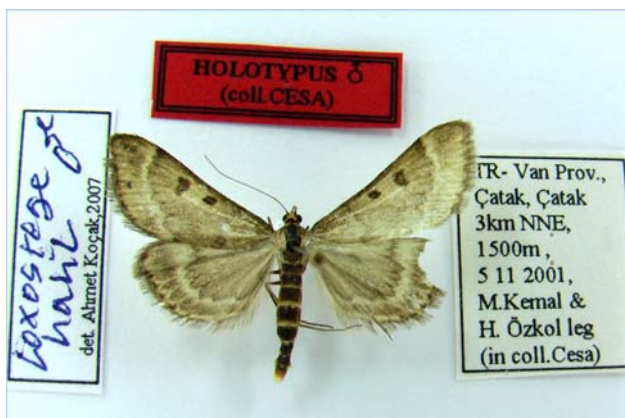
As a result of this study, *Loxostege peltaloides* Rebel appears as an endemic species for asiatic Turkey ranging from Konya to Van Provinces. Adults are nocturnal and fly in October-November in one generation. The female is unknown.

Acknowledgements

I sincerely thank to Prof. Dr. Ahmet Ömer Koçak and Asst. Prof. Dr. Muhabbet Kemal for their continuous support and helps. I also thank to Prof. Dr. Ahmet Beyarslan and Dr. Martin Lödl for their helps, in realizing my studies in the Natural History Museum Vienna, within the Erasmus program.

References

- Amsel, H.G., 1938. Beiträge zur Kleinschmetterlings-Fauna der Balkanländer und Kleinasien. *Dt. Ent. Z., Iris* 52: 152-159, Taf.4.
 Koçak, A.Ö. & M. Kemal, 2007. Preliminary checklist of *Loxostege* Hbn., with some taxonomical and geographical notes (*Lepidoptera, Pyralidae*). *Cent. ent. Stud., Misc. Pap.* 136: 2-8, 3 Tab.
 Osthelder, L., 1935. *Pyralidae* [in] Osthelder, L. & E. Pfeiffer, *Lepidopteren-Fauna von Marasch in türkisch Nordsyrien. Mitt. münch. ent. Ges.* 25: 73-104.
 Rebel, H., 1932. *Pyralidae-Gelechiidae* [in] Wagner, F., *Vierter (V.) Beitrag zur Lepidopteren-Fauna Inner-Anatoliens (Schluss). Int. Ent. Z.* 26 (18): 187-191, figs.
 Wagner, F., 1932. *Vierter (V.) Beitrag zur Lepidopteren-Fauna Inner-Anatoliens (Schluß). Int. Ent. Z.* 26 (18): 185-191, Taf.



1



2

Fig. 1- *Loxostege halil* (Holotype, male). Turkey Van Province, Çatak 3km NNE 1500m, 5 11 2001, M Kemal & H Özkol leg., photo M Kemal (Cesa). **Fig. 2-** *Loxostege peltaloides* (Type, male) As. Min. Ak-schehir 1-16. x.31 coll. Wagner, Wien, photo K. Akın.

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Re-description of male and first record of *Chrysotus pilitibia* Negrobov et Maslova from Mongolia (*Dolichopodidae*, *Diptera*)

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Abstract: Re-description of male and first record of *Chrysotus pilitibia* Negrobov et Maslova from Mongolia (*Dolichopodidae*, *Diptera*). *Cesa News* 89: 3-6, 5 figs.

Chrysotus pilitibia Negrobov et Maslova is reported from Mongolia for the first time. The male of the species is re-described and illustrated with colour pictures for the first time.

Key words: *Diptera*, *Empidoidea*, *Dolichopodidae*, *Chrysotus pilitibia*, Palaearctic Region, Mongolia, fauna, description.

Introduction

The genus *Chrysotus* Meigen, 1824, belongs to the subfamily Diaphorinae, comprising more than 320 species distributed all over the world (Grichanov, 2003-2013). The species occur usually on soil and plant leaves in mesophilous and hygrophilous habitats.

The Palaearctic species of *Chrysotus* were revised by Negrobov and his co-workers in a series of publications: Negrobov (1980), Negrobov and Maslova (1995) and Negrobov *et al.* (2000, 2003). Later Wang and Yang (2006, 2008, 2009) and Wei and Yang (2007) described 21 East-Palaearctic species of *Chrysotus*. Naglis (2010) described a new species *C. dischmaensis* from Switzerland, and Grichanov (2012) found a first representative of the *albipalpus* group in the Palaearctic Region, when describing *C. chukotkensis* Grichanov, 2012, from Chukotka (the Far East of Russia). Negrobov *et al.* (2000) published the last key to males of the Palaearctic species. The last key to males of the known Chinese species was published by Yang *et al.* (2011).

Chrysotus pilitibia Negrobov et Maslova, 1995, was briefly described from the North Ural Mountains (Yamalo-Nenetsia, Salekhard) by a strongly damaged male (with a broken head). Here we re-describe and illustrate male of *C. pilitibia*, basing on a new material found in the Mongolian collection of the Zoological Institute of the Russian Academy of Sciences, St. Petersburg (ZIN).

Material and methods

Morphological terminology and abbreviations (for wing veins) follows Cumming and Wood (2009). Body length is measured from the base of the antenna to the posterior tip of epandrium. Wing length is measured from the base to the wing apex. The relative lengths of the tarsomeres should be regarded as representative ratios and not measurements. Male genitalia were macerated in 10% KOH. Figures showing male genitalia in lateral view are oriented as they appear on the intact specimen, with the morphologically ventral surface of the genitalia facing up, dorsal surface down, anterior end facing right and posterior end facing left.

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***Chrysotus pilitibia* Negrobov et Maslova (Figs.1-5)**

Material. 1♂, Mongolia: Ara-Khangaiskii aimak [=Arkhangai Province], 49 km SSW Tüvshrüülekh, 18-19.VI.1975, M. Kozlov (ZIN).

Re-description. Male.

Length (mm): body 2.0-2.2, wing 1.8-2.0.

Head. Frons metallic green, shining; face green, laterally brownish pollinose; eyes almost contiguous; antenna black, postpedicel small, triangular, with rounded apex, slightly higher than long (0.6/0.4), shortly white pubescent; stylus subapical, shortly pubescent, much longer than postpedicel (2.3/0.4); palpus small, yellow; proboscis brown; lower post-oculars white.



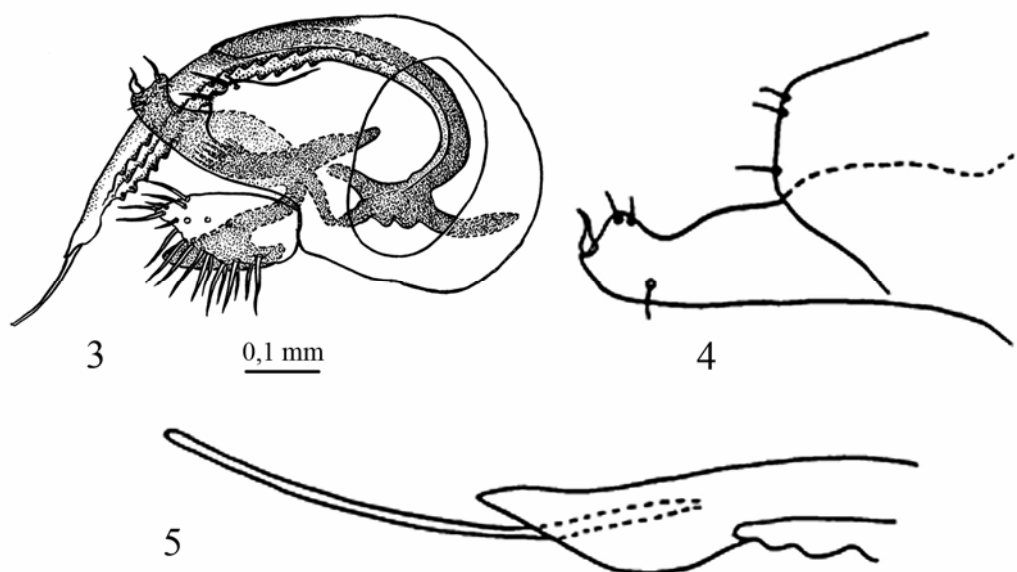
Figs. 1–2. *Chrysotus pilitibia* Negrobov et Maslova, male – 1) habitus, 2) hind leg

Thorax. Shining green, weakly grey pollinose; pleura grey pollinose; mesonotum with bronze tinge; acrostichals biseriate, well developed; 6 pairs of strong dorsocentral bristles; proepisternum with black setae; scutellum with pair of strong medial scutellars and 1 pair smaller laterad.

Wing. Membrane hyaline; veins dark; R_{4+5} and M_{1+2} parallel, slightly convergent at apex; costal section between R_{2+3} and R_{4+5} almost 3 times that of costal section between R_{4+5} and M_{1+2} (1.4/0.5); distal section of M_{1+2} almost twice longer than basal section (4.5/2.5); distal section of CuA_1 about as long as basal section; ratio of cross-vein dm-cu to distal part of CuA_1 , 0.6/2.6; lower calypter with yellow cilia; halter yellow.

Legs. Mainly black; trochanters yellowish-brown; hind femur at base, fore and mid tibiae yellow; fore and mid tarsi mainly yellow; hind tibia yellow in basal part; coxae covered with black hairs and setae; fore tibia with 1 strong anterodorsal, 1 short posterodorsal; mid tibia with 2 short anterodorsals, 2 short posterodorsals; hind femur with anteroventral and posteroventral rows of long black setae, of which anteroventral setae half as long as height of femur; hind tibia flattened laterally, with dorsal and ventral rows of long black setae, of which dorsal setae longer than ventral setae, about as long as width of tibia; hind basitarsus covered with short erect hairs ventrally and long hairs dorsally, as long as or slightly shorter than diameter of basitarsus; podomeres (from tibia to fifth tarsomere) length ratio: fore leg: 3.8/2.1/0.8/0.5/0.4/0.3, mid leg: 3.8/1.8/0.8/0.5/0.3/0.4, hind leg (Fig. 4): 10.0/1.4/0.7/0.8/0.4/0.3.

Abdomen. Metallic green, grey pollinose, covered with black hairs; epandrium ovate; surstylus curved ventrally at apex, with small setae in apical part; phallus simple, without processes; cercus brown, with short hairs.



Figs. 3–5. *Chrysotus pilitibia* Negrobov et Maslova – 3) hypopygium, 4) epandrial lobe and surstylus, 5) phallus

Female unknown.

Distribution. The species was known only from type locality in N Russia (Yamalo-Nenetsia). This is the first record of *C. pilitibia* from Mongolia.

Diagnosis. Only two Palaearctic species of *Chrysotus* have hind tibia and basitarsus ornamented with long black plumage. They can be distinguished as follows:

1. Fore coxa covered with white hairs; legs entirely black *C. pennatus*
– Fore coxa covered with black hairs; at least fore and mid tibiae yellow ... *C. pilitibia*

C. pennatus Lichtwardt, 1902 is known from Armenia, Bulgaria, China (Beijing, Hebei), ?Croatia (“Novi”), Germany, Greece, Hungary, Italy, Romania, S Russia (Adygea, Krasnodar), and Turkey (Grichanov, 2003-2013). See pictures of male hypopygium in Negrobov (1980), Wang and Yang (2009) and Yang *et al.* (2011).

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References

- Cumming, J. M. & D. M. Wood 2009.** Adult morphology and terminology [Chapter] 2. In: Brown, B. V., Borkent, A., Cumming, J. M., Wood, D. M., Woodley, N. E. & M. A. Zumbado, editors. *Manual of Central American Diptera*. Vol. 1. Ottawa: NRC Research Press: 9–50.
- Grichanov, I. Ya.** 2003–2013. A check list of species of the family Dolichopodidae (Diptera) of the World arranged by alphabetic list of generic names [online database]. Available from <http://dolicho.narod.ru/Genera3.htm> (accessed 9 April 2013).
- Grichanov, I. Ya.** 2012. A new peculiar species of *Chrysotus* from the Far East of Russia (Dolichopodidae, Diptera). *Amurian zoological journal* 4(4): 333–335.
- Naglis, S.** 2010. A new species of *Chrysotus* (Diptera, Dolichopodidae) from Switzerland. *Mitteilungen der Schweizerischen Entomologischen Gesellschaft* 83: 199–205.

- Negrobov, O. P.** 1980. A revision of Palaearctic species of the genus *Chrysotus* Mg. (Diptera, Dolichopodidae), I. *Ch. cilipes* Mg. and *Ch. laesus* Wied. species groups. *Entomologicheskoe obozrenie* 59(2): 415–420 (in Russian).
- Negrobov, O. P. & O. O. Maslova.** 1995. Revision of Palaearctic species of the genus *Chrysotus* Mg. (Diptera, Dolichopodidae), II. *Entomologicheskoe obozrenie* 74(2): 456–466 (in Russian).
- Negrobov, O. P., Tsurikov, M. N. & O. O. Maslova.** 2000. Revision of the Palaearctic species of the genus *Chrysotus* Mg. (Diptera, Dolichopodidae), III. *Entomologicheskoe obozrenie* 79(1): 227–238 (in Russian).
- Negrobov, O. P., Tsurikov, M.N. & O. O. Maslova.** 2003. A revision of the Palaearctic species of the genus *Chrysotus* Mg. (Diptera, Dolichopodidae), IV. *Entomologicheskoe obozrenie* 82(1): 223–228 (in Russian).
- Wang, M. & D. Yang.** 2006. Species of *Chrysotus* Meigen from Beijing (Diptera, Dolichopodidae). *Deutsche Entomologische Zeitschrift* 53(2): 249–255.
- Wang, M. Q. & D. Yang.** 2008. New Species of *Chrysotus* from China (Diptera: Dolichopodidae). In: Shen, Xiaocheng et al., editors. *Classification and Distribution of Insects in China*. Beijing: China Agricultural Science & Technology Press: 23–32 (in Chinese).
- Wang, M. & D. Yang.** 2009. Species of *Chrysotus* Meigen in Palaearctic China (Diptera: Dolichopodidae). *Entomologica Fennica* 19: 232–240.
- Wei, L. M. & Z. H. Yang.** 2007. Dolichopodidae. In: Li, Z. Z, Yang, M.F. & D.C. Jin, editors. *Insects from Leigongshan Landscape*. Guiyang: Guizhou Science & Technology Press: 561–587 (in Chinese).
- Yang, D., Zhang, L., Wang, M. & Y. Zhu.** 2011. Dolichopodidae. *Fauna Sinica, Insecta*, Vol. 53. Beijing: Science Press: 1–1912 (in Chinese, with English summary).

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On the distribution of *Syntormon pennatus* Ringdahl in the Palaearctic Region and a new synonym (Diptera: Dolichopodidae)

Oleg P. Negrobov⁵, Igor Ya. Grichanov⁶, Olga V. Selivanova⁷

Abstract: On the distribution of *Syntormon pennatus* Ringdahl in the Palaearctic Region and a new synonym (Diptera: Dolichopodidae). *Cesa News* 89: 6–8, figs.

Syntormon pennatus Ringdahl, 1920, is reported from Kazakhstan, Kyrgyzstan, Mongolia and some Russian regions (Komi, Altai and Karachai-Cherkessia) for the first time. *Syntormon turanicus* Stackelberg, 1927 is placed in synonymy to *S. pennatus*. The male genitalia of the species are illustrated for the first time.

Key words: *Diptera*, *Empidoidea*, *Dolichopodidae*, *Syntormon pennatus* Ringdahl, Palaearctic Region, Kazakhstan, Kyrgyzstan, Mongolia, Russia, fauna, new synonym.

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Introduction

Syntormon pennatus Ringdahl, is a rare species described by 3 males from a northern mountain region of Norway (Ringdahl, 1920). Subsequently it was found in the Russian Caucasus only (Grichanov et al., 2007).

Syntormon turanicus Stackelberg was described by a single male from the Alai Mountains in the former Khanate of Kokand (Stackelberg, 1927) within the present countries Uzbekistan or Kyrgyzstan. Later it was mentioned also from southern Kazakhstan (Negrobov, 1991), but the material was not published.

Grichanov (2006, 2013) studied the types of *S. pennatus* (the Museum of Zoology, Lund University, Lund, Sweden, MZLU) and *S. turanicus* (the Zoological Institute of the Russian Academy of Sciences, St. Petersburg, ZIN) and supposed that they represent colour phenotypes of the same species.

The authors recently examined new material of the two species from different regions of Eurasia deposited in the Zoological Institute (ZIN) and Voronezh State University (VSU). Study of this material has revealed variability in coloration among the northern and southern specimens that overlaps the two species concepts. Therefore, we do not see any justification in recognizing two separate species. So, *S. pennatus* is now confined to either high altitudes or high latitudes of the Palaearctic Region.

Syntormon pennatus Ringdahl (Figs. 1-3)

Syntormon pennatus Ringdahl, 1920: 25; Grichanov, 2006: 199; Grichanov, 2013: 8, 12, Fig. 2. Male lectotype and 2 male paralectotypes in MZLU. Type locality: Norway: Narvik.

Syntormon turanicus Stackelberg, 1927: 229; Grichanov, 2013: 8, 15, Fig. 3. Male holotype in ZIN. Type locality: «Turkestan, Chanatum Kokand, montes Alaiensis, prope amniculum Kizilsu». **Syn. nov.**

Material examined. Russia: 2 ♂♂, Komi Republic, 3 km N Ust-Tsilma, Roshchinskii rivulet, swampy pasture, Pechora River floodplain, on carex, 10.VIII.1978, Gorodkov (ZIN); 2 ♂♂, Karachai-Cherkessia, Teberda Nature Reserve, 21.VII.1985, Chalaya (ZIN); 1 ♂, Altai Republic, Ust-Kan, 8.VII.1923, Vinogradov, Yablonskii (ZIN); **Kazakhstan:** 4 ♂♂, North Tian Shan, Alma-Atinskii Nature Reserve, Right Talgar River, sweeping on grass at mountain streams, 1600 m, 5.VIII.1978, Grichanov (VSU); **Kyrgyzstan:** 1 ♂, North Tian Shan, Kungey Alatau, 15 km N Ananyevo, 1700 m, 18.VIII.1978, Grichanov (VSU); 1 ♂, Terskey Alatau, Jeti Oguz, 2200 m, 18.VII.1979, Grichanov (VSU); **Mongolia:** 1 ♂, Kobdoskii aimak [=Khovd Province], Nariin-Bulak spring, Ikh-Khavtgiin-Nuru ridge, 24.VII.1970, Emelyanov (ZIN), 1 ♂, Central aimak [=Töv Province], 20 km S Ulan Bator, 3.VII.1967, Kerzhner (ZIN).

Diagnosis and variability. Tarsi simple except for the presence of divergent ventral setae on hind basitarsus, of which basal seta is stronger and directed basally; the ventral setae on hind basitarsus as in species of *sulcipes* group, but hind tibia plumose dorsally and ventrally and hind tarsus plumose dorsally in *S. pennatus* (Grichanov, 2013). Mid femur and tibia mainly yellow (Norway, Kazakhstan and Russian Altai) or blackish except yellow knees (Komi Republic, Russian Caucasus, Kyrgyzstan and Mongolia).

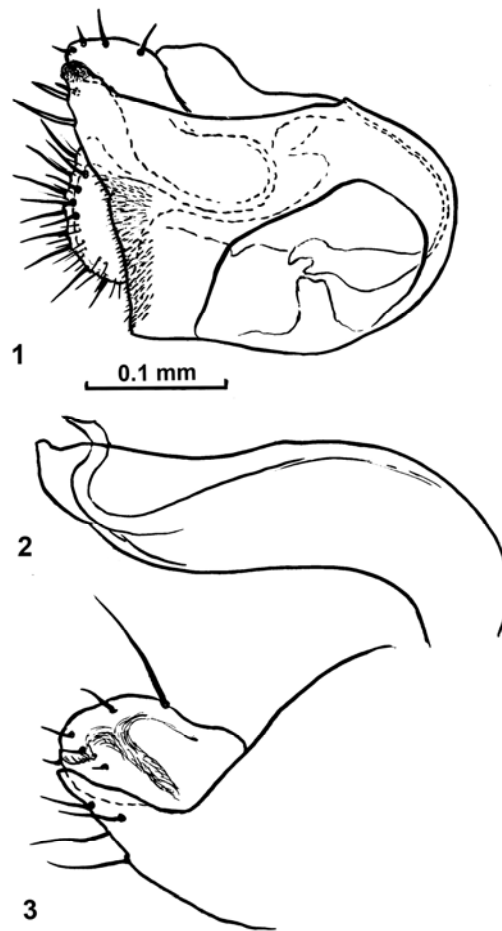
Distribution. Kazakhstan, Kyrgyzstan, Mongolia, Norway, Russia (Altai, Komi Republic, Kabardino-Balkaria, Karachai-Cherkessia), ?Uzbekistan.

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References

- Grichanov, I. Ya.** 2006. A preliminary list of Dolichopodidae (Diptera) types in the collections of Swedish Museums. *International Journal of Dipterological Research*, 17(3): 177–204.
- Grichanov, I. Ya.** 2013. Systematic notes on West-Palearctic species of the genus *Syntormon* Loew (Diptera: Dolichopodidae). In: Grichanov, I. Ya. & Negrobov, O. P. (Eds.), *Fauna and taxonomy of Dolichopodidae (Diptera). Collection of papers*. St.Petersburg: VIZR RAAS (Plant Protection News Suppl.): 3–26.
- Grichanov, I. Ya., Volfov, B. I. & Kustov, S. Yu.** 2007. New records of Dolichopodidae (Diptera) from the Caucasus. *International Journal of Dipterological Research*, 18(4): 279–296.
- Negrobov, O. P.** 1991. Dolichopodidae. In: Sóos, Á. & Papp, L. (Eds.), *Catalogue of Palearctic Diptera. Volume 7. Dolichopodidae–Platypezidae*. Budapest: Akadémiai Kiadó: 11–139.
- Ringdahl, O.** 1920. Neue skandinavische Dipteren. *Entomologisk Tidskrift*, Stokholm, 41: 24–40.
- Stackelberg, A. A.** 1927. Dolichopodidae turanicae novae vel minus cognita. *Konowia*, 6: 225–233.



Figs. 1-3. *Syntormon pennatus* Ringdahl, male, details of hypopygium, left lateral aspect – 1) hypopygium, 2) phallus, 3) surstylus.

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